

about concepts and practices of the CHW in some countries of South America. That information will be useful to design a questionnaire addressed to healthcare managers in those countries. **METHODS:** Publications review about CHW. The searching has been done through the data bases LILACS and MEDLINE since 1970 till now. The used keywords were: Agente Comunitário de Saúde, Agente Comunitario de Salud, Community Health Aides, Community Health Workers, Lay Health Worker. The countries included were Bolivia, Brazil, Colombia, Ecuador, and Peru **RESULTS:** There were founded out 254 articles, 63% are later than 2000 and 62% come from Brazil. Besides that, there were an previous literature review and reports of national and international organizations. The publications raise different issues related to CHW: roles and activities (generalist and specialist), recruitment and selection, training, supervision and support, relationships with the formal health services, incentives. The CHW may improve the access and the coverage of the basic public healthcare services. Unlike, Bolivia, Colombia, Ecuador and Peru, where most of the participation is voluntary and supported by NGO, in Brazil the CHW are members of the Nacional Health System through the Family Health Program. **CONCLUSIONS:** Literature have reported that CHW carry out a variety of health tasks, and that CHW deliver a wide range of interventions in such areas as maternal and child health, primary health care, malaria, tuberculosis and HIV/AIDS prevention and control.

HEALTH CARE USE & POLICY STUDIES – Prescribing Behavior & Treatment Guidelines

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TRENDS OF VITAMIN D PRESCRIBING AMONG ELDERLY AMERICANS: RESULTS FROM NATIONAL AMBULATORY MEDICAL CARE SURVEYS 2000 TO 2009

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OBJECTIVES: To evaluate the current national trends in Vitamin D prescribing among the elderly seeking care in office-based physician provider settings. **METHODS:** Cross-sectional study was conducted using the National Ambulatory Medical Care Survey (NAMCS) data from 2000 to 2009. All ambulatory office visits made by the elderly aged ≥ 65 years of age were included in the study. Bivariate associations between vitamin D and study variables such as patient demographics, region, physician's specialty, insurance status, and osteoporosis diagnosis were evaluated using chi square tests. Logistic regression analyses were conducted to determine the predictive factors associated with a vitamin D. All analyses were performed with SAS statistical software, version 9.1, at an alpha of 0.05. **RESULTS:** Of the 279,819 office-based physician visits made by the NAMCS participants from 2000 through 2009, there were 74,904 (26.7%) visits that met the inclusion criteria. This estimate represented 2.4 billion physician-office visits from the elderly in the United States during the 10-year period. Of the included visits, 1,112 (1.91%) were associated with a vitamin D. Race was a significant predictor in both the adjusted and unadjusted models. Visits from other races were two times more likely to include vitamin D when compared to white race (Adjusted OR = 1.54; 95% CI 1.17-2.03), while visits made by black patients were less likely to include vitamin D therapy (Adjusted OR = 0.43; 95% CI 0.38-0.50). The visits made by osteoporosis patients were five times more likely to be associated with vitamin D therapy than visits made by patients without the diagnosis (Adjusted OR = 5.23; 95% CI 4.04-6.77). **CONCLUSIONS:** This study indicated that very few patients were prescribed vitamin D. The overall prescribing patterns of vitamin D therapy, however, showed a steady and continuous increase during past decade in the United States.

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EVALUATION OF PRESCRIBER PERCEPTIONS OF A NEAR-REAL TIME FAX ALERT PROGRAM FOR POTENTIAL DRUG-DRUG INTERACTIONS

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OBJECTIVES: To determine prescribers' perceptions of near-real time messaging for potential drug-drug interactions (PDDIs) using a fax alert drug utilization review intervention. **METHODS:** This was a 6-month prospective study where a pharmacy benefit manager (PBM) distributed evidence-based summaries of 18 different PDDIs that included references and suggested management strategies. Fax alerts were individualized letters sent to the prescriber of the 2nd drug of a PDDI for an individual patient. A 16-item questionnaire to assess prescribers' perceptions of the intervention accompanied each individualized PDDI evidence-based summary. Descriptive and multivariate logistical regression analyses were used to assess questionnaire responses. **RESULTS:** A total of 8075 fax alerts were distributed and 977 returned questionnaires, yielding a 12.1% response rate. 848 (86.8%) responses were completed by physicians and 71 (7.3%) completed by nurse practitioners. The most common PDDI fax alerts sent were for warfarin-statin (3511, 43.5%) and warfarin-thyroid (2111, 26.1%) interactions. 42.6% of respondents agreed or strongly agreed that fax alerts were a good way to communicate with them. A total of 37.5% of respondents, however, either agreed or strongly agreed that the fax alert was a "waste of my time." 59.1% of respondents either disagreed or strongly disagreed that they would prefer to receive a telephone call when interactions like this occur. 50.5% indicated their computer system provided drug interaction alerts. When asked to evaluate the evidence-based information provided in the alert, carbamazepine-macrolide, ciprofloxacin-tizanidine, and statin-macrolide alerts were rated more favorable than other PDDIs. Prescribers who had received alerts and specialists were less likely to respond to the questionnaire (OR=0.685, $p < 0.0001$ and OR=0.851, $p = 0.0205$, respectively). **CONCLUSIONS:** PBMs detect and notify

prescribers of PDDIs during claims adjudication. This study found that some prescribers valued fax alerts, especially for less well-known PDDIs. PDDI alert programs should carefully select PDDIs and other screening criteria to ensure prescribers respond to messaging.

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ANALYSIS OF FACTORS INFLUENCING DRUGS PRESCRIPTION DECISION MAKING IN UKRAINE

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OBJECTIVES: In Ukraine currently there is no national reimbursement system for pharmaceutical products and major part of pharmaceutical provision, even in hospitals, is covered by out-of-pocket payments of patients. The aim of this study was to define what factors have an impact on drugs prescription process by hospital clinical specialists in Ukraine. **METHODS:** A brief questionnaire was distributed to conventional sample of 299 doctors with different specializations (surgeons, anesthesiologists, pulmonologists) from four Ukrainian cities (Odessa, Kiev, Dnipropetrovsk, Lviv). Doctors were proposed to rank on 10 points' scale effectiveness, price, efficiency, and number of patients a month he/she is ready to prescribe an antibiotic drug. A dependence between ranking of effectiveness, price, and efficiency of the drug and a number of patients the doctor was ready to prescribe it were analyzed in SPSS using correlation and linear regression analyses. **RESULTS:** The responders' missing rate was equal to 1% due to convenient sample selection and face-to-face questionnaire distribution. The difference in answers within doctors of different specializations was not statistically significant. Price of the drug was negatively associated with frequency of drug's prescription for doctors of all specializations (Beta = -0.171; Sig=0.004). There were no difference in ranking of efficiency and effectiveness (Pearson correlation 0.684; Sig 0.000). **CONCLUSIONS:** As we conclude from the analysis, practical doctors in Ukraine highly associate efficiency with effectiveness of the medical products. Though, clinical effectiveness has an impact on prescription practice, the price is a determinant.

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USING THE THEORY OF PLANNED BEHAVIOR TO PREDICT TEXAS PHARMACISTS' INTENTION TO REPORT SERIOUS ADVERSE DRUG EVENTS TO THE FDA

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OBJECTIVES: To use the theory of planned behavior (TPB) to predict Texas pharmacists' intention to report serious adverse drug effects (ADEs) to the Food and Drug Administration (FDA). **METHODS:** Data were collected from practicing Texas pharmacists using a mail questionnaire. The study measured intention to report serious ADEs, attitude (A), subjective norm (SN), perceived behavioral control (PBC) and demographic and practice characteristics. Intention (3 items) was measured using a 7-point unipolar scale ranging from extremely unlikely (1) to extremely likely (7). Attitude (5 items), SN (3 items) and PBC (2 items) were measured on a 7-point bipolar scale ranging from -3 (e.g., strongly disagree) to +3 (e.g., strongly agree). The model was run using multiple regression analysis. **RESULTS:** A majority of the 377 respondents were male (52.9%) and Caucasian (70.2%). Overall, pharmacists intended to report ADEs (mean = 15.87, SD = 4.22; range: 3-21), had a favorable attitude toward reporting (mean = 4.62, SD = 4.92; range: -12 to +15), had a favorable SN (mean = 5.65, SD = 2.99; range: -5 to +9) and strong PBC (mean = 3.54, SD = 2.69; range: -6 to +6). A ($\beta = 0.221$, $p < 0.001$), SN ($\beta = 0.438$, $p < 0.001$) and PBC ($\beta = 0.028$, $p > 0.05$) together accounted for 34.0 percent of the variance in intention to report serious ADEs to the FDA ($F = 63.60$, d.f. = 3, 370, $p < 0.001$). **CONCLUSIONS:** Pharmacists showed a strong positive intent to report serious ADEs to the FDA. Attitude and SN were significant predictors of intent. Strategies to help pharmacists report more ADEs should focus on helping pharmacists see the value of reporting and altering their perception of social pressure towards reporting. The TPB has utility in predicting ADE reporting behavior.

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NATIONAL PATTERNS AND TRENDS OF OFF-LABEL USE OF ANTIPSYCHOTIC MEDICATIONS IN THE ELDERLY FOLLOWING FDA BLACK BOX WARNINGS

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OBJECTIVES: There are conflicting reports as to whether two FDA "black box" warnings regarding risk of mortality related to use of antipsychotic medications to treat patients aged 65+ with dementia and a growing body of evidence of other serious adverse effects has resulted in decreased use. This analysis explores trends and patterns of "off-label" use of antipsychotics in the elderly. **METHODS:** Longitudinal analysis of a large nationally representative administrative claims database (2005-2010). The sample includes Medicare, Medicaid and commercially insured patients aged 65+ enrolled 11-12 months with at least three or more prescription fills for the same antipsychotic drug. **RESULTS:** The majority of antipsychotic prescribing is for "off label" conditions. Of the elderly 65+ treated with antipsychotics in 2010, 32.8% had a diagnosis of dementia, 24.3% anxiety disorder, and 20.9% depression; 11.3% and 10.8% were for approved conditions bipolar disorder and schizophrenia. In contrast to recent studies reporting significant declines in use of antipsychotics to treat symptoms of dementia, this analysis reveals high and increasing rates of use—20.6% of patients with dementia were prescribed antipsychotics in 2010. This represents an 83 percent increase from 2005 (first black box warning for atypical antipsychotics issued), but a slight decline from the peak rate of 21.8% in 2008 (FDA